



ABSTRACT

A catheter device that is useable to penetrate from a blood vessel in which the catheter device is positioned to a target location comprises a flexible catheter advanceable into the first blood vessel, a tissue penetrator lumen adapted to receive an operative tissue penetrator which is usable to penetrate from the blood vessel to the target location when properly aimed. Further said catheter including an imaging transducer fixedly mounted on or within the catheter body to provide an imaging signal from which an image of the target location can be obtained. The catheter device may include an imageable marker on the catheter to form on the image obtainable from the imaging signal a penetrator path indication that indicates the path that will be followed by the tissue penetrator when the tissue penetrator exits from the catheter. Alternatively, or addition thereto, the imaging transducer may comprise a plurality of imaging elements which are located so that the penetrator path indication can be obtained. A method of utilizing such a catheter device to bypass an arterial obstruction is also disclosed.

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